

WHAT IS CLAIMED IS:

1. A fluid composition suitable for in situ forming and adhering a touch-dry, non-tacky covering element onto a surface, comprising:
 - 5 (a) an effective amount of a tacky component such that the formed covering element adheres to the surface;
 - (b) a film-forming, non-tacky component, wherein said film-forming, non-tacky component comprises at least one low surface energy, surface seeking moiety, wherein said film-forming, non-tacky component is incompatible with the tacky
10 component, and wherein the film-forming, non-tacky component is present in an effective amount such that an outer surface of the in situ formed covering element is non-tacky when the covering element is touch dry; and
 - (c) a sufficient amount of at least one volatile solvent such that the fluid composition has a coatable viscosity allowing the fluid composition to be coated onto said
15 surface.
2. The fluid composition of claim 1, wherein the tacky component comprises a pressure sensitive adhesive comprising a (meth)acrylate polymer.
- 20 3. The fluid composition of claim 2, wherein the (meth)acrylate polymer is a copolymer of monomers comprising about 40 to about 100 weight percent of an alkyl (meth)acrylate and 0 to about 60 weight percent of a free radically copolymerizable monomer.
4. The fluid composition of claim 3, wherein the alkyl (meth)acrylate comprises an alkyl
25 moiety of 1 to 10 carbon atoms and the copolymerizable monomer comprises a functional group selected from carboxylic acid, carboxylic acid ester, hydroxyl, anhydride, epoxy, thiol, isocyanate, sulfonamide, urea, carbamate, carboxamide, amine, ammonium, oxy, oxo, nitro, nitrogen, sulfur, phosphate, phosphonate, cyano, and combinations thereof.
- 30 5. The fluid composition of claim 2, wherein the tacky component comprising a copolymer derived from monomers comprising, based upon the total weight of the monomers,

40 to 100 weight percent of isooctyl (meth)acrylate, 0 to 60 weight percent of (meth)acrylamide, and 0 to 30 weight percent of vinyl acetate.

6. The fluid composition of claim 1, wherein the film-forming, non-tacky component comprises a polymer selected from the group consisting of a cellulosic polymer, a siloxane containing polymer, a polyvinylacetate, a polymethyl(meth)acrylate, a fluorinated polymer, a fluorosilicone polymer, a styrene-butadiene rubber, a polyurethane, a vinyl copolymer, a polyolefin, a polyamide, a polyimide, a polyamideimide, a polyester, and combinations of these.

7. The fluid composition of claim 6, wherein the film-forming non-tacky component comprises a siloxane containing polymer.

8. The fluid composition of claim 7, wherein the siloxane containing polymer is selected from a silicone polyurea block polymer, a silicone polyurethane block polymer, a silicone polyurea/urethane block polymer, and combinations thereof.

9. The fluid composition of claim 1, wherein the weight ratio of the tacky component to the non-tacky component is in the range from about 1:10 to about 10:1.

10. The fluid composition of claim 1, wherein the volatile solvent is selected from the group consisting of ethanol, acetone, isopropanol, water or a combination thereof.

11. The fluid composition of claim 10, wherein the volatile solvent comprises isopropanol.

12. The fluid composition of claim 1, further comprising a therapeutically effective amount of a pharmacologically active agent.

13. The fluid composition of claim 1, further comprising a therapeutically effective amount of a pharmacologically active agent.

14. A transdermal drug delivery system, comprising:

- (a) first and second opposed major surfaces;
- (b) a first tacky phase precipitatively formed proximal to the first surface such that the first surface is sufficiently tacky to allow the transdermal drug delivery system to be adhered to a surface of a host;
- (c) a second, non-tacky, film phase precipitatively formed proximal to the second surface such that at least substantially all of the second surface is non-tacky, wherein the film phase comprises at least one low surface energy, surface seeking moiety, wherein the weight ratio of the tacky phase to the non-tacky phase is in the range from 1:20 to 20:1; and
- (d) a therapeutically effective amount of a pharmacologically active agent or prodrug form thereof dispersed in the first, tacky phase.

15. A fluid composition suitable for in situ forming and adhering a touch dry, non-tacky covering element onto a surface comprising:

- (a) from about 1 to about 50 weight percent of a tacky component, wherein the tacky component comprises a pressure sensitive adhesive comprising a copolymer of monomers comprising about 40 to about 100 weight percent of an alkyl (meth)acrylate and 0 to about 60 weight percent of a free radically copolymerizable monomer;
- (b) a film-forming, non-tacky component, wherein said film-forming non-tacky component comprises at least one low surface energy, surface seeking moiety, wherein said film-forming, non-tacky component is incompatible with the tacky component, and wherein the film-forming, non-tacky component is present in an effective amount such that an outer surface of the in situ formed covering element is non-tacky when the covering element is touch dry, and wherein the weight ratio of the tacky phase to the non-tacky phase is in the range from 1:20 to 20:1; and

- (c) a sufficient amount of at least one volatile solvent such that the fluid composition has a coatable viscosity allowing the fluid composition to be coated onto said surface.

5 16. A multi-layer covering element forming fluid composition comprising:

- (a) an effective amount of a tacky component such that the formed covering element is capable of adhering to a surface;
- (b) a film-forming, non-tacky component, wherein said film-forming, non-tacky component comprises at least one low surface energy, surface seeking moiety, wherein said film-forming, non-tacky component is incompatible with the tacky component, and wherein the film-forming, non-tacky component is present in an effective amount such that an outer surface of the formed covering element is non-tacky when the covering element is touch dry; and
- (c) a sufficient amount of at least one volatile solvent such that the fluid composition has a coatable viscosity allowing the fluid composition to be coated onto a surface;

wherein when the fluid composition is coated onto such surface and allowed to dry, the tacky and non-tacky components undergo phase separation to produce a bilayer covering element.

20 17. A fluid composition comprising:

- (a) an effective amount of a tacky component;
- (b) an effective amount of a film-forming, non-tacky component, wherein said film-forming, non-tacky component comprises at least one low surface energy, surface seeking moiety and said film-forming, non-tacky component is incompatible with the tacky component; and
- (c) a sufficient amount of at least one volatile solvent so that the fluid composition has a coatable viscosity

wherein, when the fluid composition is applied to a substrate, the tacky component and the non-tacky component undergo a phase separation as the composition dries to produce a touch

dry, non-tacky covering element having a tacky layer adhering the covering element to a surface of the substrate and a non-tacky protective film layer.

18. The fluid composition of claim 1, wherein the film-forming, non-tacky component
5 comprises a polymer comprising at least one siloxane moiety and/or at least one fluorine containing moiety.

19. The fluid composition of claim 1, wherein the tacky component comprises an acrylate
pressure sensitive adhesive comprising a copolymer formed by copolymerizing about 60 to about
10 80 percent isooctyl acrylate, about 1 to about 10 percent acrylamide, and about 5 to about 30 percent vinyl acetate.